

CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

MDOT PROJECT MANAGER Armando V. Lopez Jr.			JOB NUMBER (JN) Various See list in Solicitation	CONTROL SECTION (CS) Various See list in Solicitation
DESCRIPTION IF NO JN/CS Construction Testing and Inspection, Geotechnical Engineering Services & Road & Bridge Construction Engineering Services				
MDOT PROJECT MANAGER: Check all items to be included in RFP. WHITE = REQUIRED GRAY SHADING = OPTIONAL			CONSULTANT: Provide only checked items below in proposal.	
Check the appropriate Tier in the box below				
<input type="checkbox"/> TIER I (\$25,000-\$99,999)	<input type="checkbox"/> TIER II (\$100,000-\$250,000)	<input checked="" type="checkbox"/> TIER III (>\$250,000)		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Understanding of Service	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Innovations</i>	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Safety Program</i>	
N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Organization Chart	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Qualifications of Team	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Past Performance	
Not required as part of official RFP	Not required as part of official RFP	<input checked="" type="checkbox"/>	Quality Assurance/Quality Control	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Location: The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.	
N/A	N/A	<input type="checkbox"/>	Presentation	
N/A	N/A	<input type="checkbox"/>	Technical Proposal (if Presentation is required)	
3 pages (MDOT forms not counted) (No Resumes)	7 pages (MDOT forms not counted)	19 pages (MDOT forms not counted)	Total maximum pages for RFP not including key personnel resumes	

REQUEST FOR PROPOSAL

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. **Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.**

RFP SPECIFIC INFORMATION

☒ BUREAU OF HIGHWAYS ☐ BUREAU OF TRANSPORTATION PLANNING ** ☐ OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

☒ NO ☐ YES DATED _____ THROUGH _____

<input checked="" type="checkbox"/> Prequalified Services – See page 5 of the attached Scope of Services for required Prequalification Classifications.	<input type="checkbox"/> Non-Prequalified Services - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed.
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☒ **Qualifications Based Selection** – Use Consultant/Vendor Selection Guidelines

For all Qualifications Based Selections, the selection team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

**** For RFP's that originate in Bureau of Transportation Planning only**, a price proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (**see address list, page 2**). The price proposal must be submitted in a sealed manila envelope, clearly marked in large red letters **"PRICE PROPOSAL – TO BE OPENED ONLY BY SELECTION SPECIALIST."** The vendor's name and return address **MUST** be on the front of the envelope. The price proposal will only be opened for the highest scoring proposal. Unopened price proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your bid being opened erroneously by the mail room.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

☐ **Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

☐ **Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

☐ **Low Bid** (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked **"SEALED BID."** The vendor's name and return address **MUST** be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

PROPOSAL SUBMITTAL INFORMATION

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER 4	PROPOSAL DUE DATE 12/17/07	TIME DUE 1:00 P.M. EST
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PROPOSAL AND BID SHEET MAILING ADDRESSES

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

☒ MDOT Project Manager ☐ MDOT Other

Armando V. Lopez Jr., P.E., Delivery Engineer
9495 E. Potter Road
Davison, Michigan 48423

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

Lansing Regular Mail	OR	Lansing Overnight Mail
<input checked="" type="checkbox"/> Secretary, Contract Services Div - B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48809		Secretary, Contract Services Div - B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48833
<input type="checkbox"/> Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48809		Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48833

GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet
5100G – Certification of Availability of Key Personnel
5100I – Conflict of Interest Statement

(These forms are not included in the proposal maximum page count.)

Michigan Department of Transportation
SCOPE OF SERVICE
FOR
AS NEEDED CONSTRUCTION SERVICES
Inspection and Testing Services

CONTROL SECTION(S): Various

JOB NUMBER(S): Various

PROJECT LOCATION: Various locations within the Davison TSC area.

DESCRIPTION OF WORK:

Provide a list of a minimum of five (5) experienced personnel for each of the inspection and testing services on an as needed basis for the work groups outlined below. It should be noted that the person doing the inspection for the required work will also be required to perform their own testing. Preference will be given to the firm that can perform inspection and testing and mention this in their LOI. If the firm has personnel that can work in several or all of the work groups, put this person down for each group. The Davison TSC prefers to have one inspector that moves from one project to another for the services required and can work in several or all of the work groups. Preference will be given to the firm that could supply such a person or several people.

For the Traffic & Safety Inspection Services & Bridge Painting Inspection classification, these two services are desirable for the prime consultant to have but not required. Please provide information of the staff experience(s). Firms with these areas of expertise will be looked at favorably.

Inspection & Engineering services may be needed full time (overtime may be necessary), beginning March 1, 2008, or as soon as the contracted services are awarded, through December 31, 2009. Some of the projects will also require night work. The consulting firm shall not be considered by the selection committee if the aforementioned stipulations are not met.

Work Group 1:

Inspection and testing services may be needed for "Road Work" items hot mix asphalt (HMA) construction, Portland cement concrete construction, concrete pavement repairs, guardrail installation, new freeway construction, permanent signing, truss and cantilever signs, foundation installation, traffic signal installation, earth work items, temporary traffic control items and other road construction operations. These inspection and testing services are anticipated to be primarily during "normal" working hours, Monday through Sunday, but some night work may be required.

Work Group 2:

Inspection and testing services may be needed for “Bridge Work” items hot mix asphalt (HMA) construction, Portland cement concrete construction, concrete pavement repairs, guardrail installation, bridge approach construction, permanent signing, bridge maintenance work, pin and hangers, structural steel blasting and painting, structural steel and concrete repairs, bridge deck overlays, temporary traffic control, rip-rap installation within streams and other bridge construction operations. These inspection and testing services are anticipated to be primarily during "normal" working hours, Monday through Sunday, but some night work may be required. Night work that may be required would be for hydro-demolition work, setting and removing beams, some of the demo work and night pours.

Work Group 3:

This work group will be for surveying and construction layout and may involve some or all of the following:

This work group will consist of performing all construction staking operations that are to be performed by “the Engineer” as indicated in the Special Provision for Staking Bridges in combined Bridge/Road Projects using Contractor Staking SP104(A), the Special Provision for Contractor Staking and the MDOT 1996 Standard Specifications, 2003 Interim Standard Specifications and or the 2003 Standard Specification for Construction. On projects that contain a bridge portion and the Contractor Staking provisions have been removed the consultant will be responsible for setting all grades, elevations etc necessary for construction of the bridge as determined by the Project Engineer Manager.

Right of Way staking, establishing horizontal and vertical control points, and establishment of bench marks shall be performed by the Consultant. Consultant services will begin upon approval for consultant services from MDOT. No work is to start on this contract until approval is received.

The Consultant shall furnish all services, equipment and labor necessary to conduct and complete the Consultant Construction Staking Services described herein. The Consultant shall also furnish all materials, equipment, supplies, and incidentals necessary to perform the Services (other than those designated in writing to be furnished by the Department), and check and/or test them prior to use in carrying out this work.

Work Group 4:

This work group will be for Geotechnical Engineering, Construction Engineering Road & Bridge. The Geotechnical Engineering Consultant shall be expected to perform the following but not limited to: Site Inspection, subsurface borings, Soil Profiles, Soil Testing for Granular Soils, Fine Grained Soils and Organic Soils, Consolidation Tests for Settlement Strength Tests for Stability and Bearing Capacity, Cut Slope Stability, Embankment Pressure Distribution, Treatment for Embankment Settlement, Monitoring Construction Operations and Quality Assurance, Slope Stabilities, Recombination for Vertical Drains, Deep Foundation Design for Piles and Temporary Sheet piling Left in Place.

If any of the following is performed by the Consultant, a recommendation report (three copies) shall be generated within 3 work days and given to the Engineer with the following but not limited to: Definitive scope of recommendation; all related documents related to the site investigation i.e. plans, geotechnical maps etc., interpretation of subsurface conditions. This report shall also include as required the following recommendations for embankment backfills, foundation alternatives, construction considerations, special notes, embankment considerations for foundation settlement, amount and time, remedial methods and costs, down drag, construction monitoring, fill Construction (materials and construction), fill stability remedial measures and costs and safety factors, piles & suitable types, temporary steel sheeting left in place, tip elevations, load capacities, driving criteria, drivability and load tests.

Full-time services will not be required for all projects at all times. This contract is for "as-needed" services, based on the intermittent needs of the project office for inspection and testing personnel. The Consultant's point of contact will be contacted with the requests for staff. Every attempt will be made to submit requests and schedule at least one week prior to the need for personnel, however it is expected that any requests made will be complied within a 24 hour period.

The consultant Engineering staff and inspector(s) will report and be directly responsible to the Project Manager. Work hours and assignments will be given to the consultant inspector(s) by the Project Manager and/or duly appointed representatives from the Davison TSC, appointed by the Delivery Engineer. The consultant inspector(s) will cooperate with the senior level MDOT Technicians and above to ensure that adequate inspection and testing services are provided.

The initial authorization will be set up for 10,000 hours it is anticipated that approximately 9,000 of the hours would be for inspection/testing and 500 for survey type work and 500 hours are assistance in Geotechnical Engineering Services, Construction Engineering Road & Bridge Construction Engineering

The projects that these services may be utilized on include, but are not limited to:

C.S. / J.N.	Location	Description	Approx. Start	Approx. Completion
25132-87636 25132-87641	I-475 Interchanges at Pierson Road and Carpenter Road, Broadway, Longway, Atherton, Hempill and Bristol	Upgrade Shoulder Freeway Lighting on Ramps (FWY LIGHTING)	5/1/08	11/1/08
25042-100614	I-69 from M-13 to Elms Rd	Cable Guardrail (T&S-SAFETY)	7/1/08	10/1/08
25092-84118	M-15 @ Potter Road	Add Center Left Turn Lane (T&S-SAFETY)	7/1/08	8/1/08
25072-100245	M-54, Mt Morris Rd to M-57 and Hill Rd to I-69; M-57, Seymour Rd to Brent Run Ck	Single Course Micro-Surface (CPM)	6/1/08	7/1/08
44031-100578	M-53 from Newark Rd to Imlay City Rd	Signal Modernization and Interconnect (CMAQ)	10/1/08	12/1/08
25131-87775	South Junction and North Junction of I-75	Install Permanent Changeable Message Signs (ITS)	10/1/08	6/1/09
25132-87776	2 locations on I-475 and I-69	Install Permanent Changeable Message Signs (ITS)	10/1/08	6/1/09
25042-87777	I-69 from Elms Road to I-75	Install Permanent Changeable Message Sign (ITS)	10/1/08	6/1/09
25132-87794	Various Locations on I-75, I-475 and I-69 in Genesee County	Design & Installation of sensors and a Dynamic Messaging System (CMAQ)	10/1/08	6/1/09
44031-100469	M-53 at St. Clair St in Almont to Imlay City Rd in Imlay City (7 intersections)	Signal Optimization (CMAQ)	4/1/08	7/1/08
25091-100474 25092-100474	M-15 at W. Hegel Rd in Goodrich to Main St in Otisville (11 intersections)	Signal Optimization (CMAQ)	4/1/08	7/1/08
44011-55908	M-24 from Pratt to S. of I-69	Trunkline widening	Summer 2006	10/1/08

25042-60479 25042-86879 25042-87587 25042-87434	I-69 from M-13 to Elms Road	microsurface	Spring 2007	7/1/08
44032-83568	M-53 bridge at Peters Drain	Bridge replacement	7/1/08	9/1/08
25032-80450	I-75 from Oakland Cl to Saginaw Cl.	Freeway replacement sign (T&S Signs)	3/1/08	7/1/08
25101-87791	M-57 from Nichols Rd to M-54 and I-75 at Mt. Morris Ramps	Signal optimization, modern, interconnect and actuation (CMAQ)	11/1/07	6/1/08
25132-87256	I-475 end of barrier wall to I-75	HMA Reconstruct (R&R)	4/1/08	9/1/08
25074-100179	M-54 at Reid Rd	Add Center Left Turn Lane (T&S-SAFETY)	9/1/08	10/15/08
25131-102021	I-75 over Cook Rd, Fenton Rd. over I-75, and M-24 over Aban CR RR	Steel Repairs	9/1/08	12/1/08

ANTICIPATED START DATE: March 1, 2008

ANTICIPATED COMPLETION DATE: December 31, 2009

PRIMARY PREQUALIFICATION CLASSIFICATION:

Technical Assistance

SECONDARY PREQUALIFICATION CLASSIFICATION:

Geotechnical Engineering Services
Aggregate Inspection & Testing
Bituminous Pavement Inspection
Density Inspection & Testing
Portland Cement Concrete Inspection & Testing
Bridge Painting Inspection
Construction Staking
Road Construction Engineering
Bridge Construction Engineering

DBE REQUIREMENT: N/A

MDOT PROJECT MANAGER:

Armando V. Lopez, Jr., P.E., Delivery Engineer
Davison TSC, Bay Region
9495 E. Potter Road
Davison, Michigan 48423
Phone: (810) 653-7470
Fax: (810) 653-1248
E-mail: lopeza@michigan.gov

The Consultant shall contact the Project Manager prior to beginning any work on this Project.

GENERAL INFORMATION:

- A. The Consultant shall furnish all services and labor necessary to conduct and complete the Construction Engineering Services described herein. The Consultant shall also furnish all materials, equipment, supplies, and incidentals necessary to perform the Services (other than those designated in writing to be furnished by the Department), and check and/or test the materials, equipment, supplies, and incidentals as necessary in carrying out this work. The Services shall be performed to the satisfaction of the Department consistent with applicable professional standards.
- B. The Consultant's principal contact with the Department shall be through the designated Project Manager.
- C. The Services described herein are financed with public funds. The Consultant shall comply with all applicable Federal and State laws, rules, and regulations
- D. The Consultant agrees to demonstrate knowledge of, and performance in compliance with, the standard construction practices of the Department; the Project construction contract, proposal, and plans; the Standard Specifications for Construction and all applicable publications referenced within; the Michigan Construction Manual; the Materials Sampling Guide; the Materials Quality Assurance Procedures Manual; the Density Control Handbook; and any and all other references, guidelines, and procedures manuals needed to carry out the work described herein in an appropriate manner.

- E. The Consultant will notify the MDOT Project Manager, in writing, prior to any personnel changes from those specified in the Consultant's original approved proposal. Any personnel substitutions are subject to the review and approval of the MDOT Project Manager.
- F. The selected consultant staff will report directly to the MDOT TSC Construction Team. This team will consist of a Delivery Engineer, Assistant Delivery Engineer and construction staff assigned to this project for its entirety and will be on site as necessary during construction. The consultant staff will operate under the MDOT Delivery Engineer and Assistant Delivery Engineer and shall be in charge of the day-to-day construction activities for the project. MDOT will retain control over all monetary extras and changes and the design revision process. All of the consultant personnel shall meet with the MDOT Team prior to construction of this project. This will familiarize everyone with one another and define/clarify roles and responsibilities.
- G. The consultant will be required to document and process all IDRs and other documents using FieldBook. MDOT staff may review the FieldBook at any time during regular business hours and create FieldManager items.
- H. The consultant shall assist and attend weekly progress meetings. The consultant shall record and publish meeting minutes as it relates to issues as determined by the MDOT staff.
- I. MDOT Field Office and Communications staff shall handle primary communication issues. It is expected that the consultant be available to MDOT at all times for issues that may need clarification for public releases.
- J. The Consultant shall contact the Project Engineer Manager (PEM) prior to beginning any work on this Project. Key consultant personnel are required to attend a partnering session with the MDOT staff prior to construction.
- K. The inspectors shall submit time sheets on a weekly basis to the Project Engineer for review and approval.

CONSULTANT RESPONSIBILITIES:

The Consultant shall perform field operations in accordance with the Department's Personal Protective Equipment (PPE) Policy as stated in the MDOT Guidance Document #10118. A current copy of MDOT's PPE Policy is available on the Bulletin Board System. The Consultant shall perform field operations in accordance with MIOSHA regulations and accepted safety practices. Vehicles that the consultant uses will be in good working condition and if on the project site will be required to have a rotating beacon as well as conspicuity tape on the back of the vehicle as well as the rear two quarter panels.

- A. Provide full time experienced inspection and testing services as needed and perform inspection and testing services under the direction of the Project Engineer Manager. The inspector(s) assigned to this project will report and be directly responsible to the Project Engineer Manager who is in charge of the project's construction. Provide computer equipment necessary to run Field Manager.
- B. Provide, to the satisfaction of the Department, inspection and testing services required for road bituminous construction, Portland cement concrete construction, aggregate construction, ditching and drainage, joint repair, and guardrail. Perform all reporting, measurement, computation, and documentation required by the Specifications, plans, proposal, the Michigan Construction Manual, the MDOT Materials Sampling Guide and any and all other applicable references, guidelines, and procedures manuals required for the inspection and testing for construction of the aforementioned projects, and as directed by the Project Engineer Manager.
- C. That all work under this Agreement will be performed in compliance with the contract documents and the standard practices of the Department. Sampling frequencies for inspection and testing will be as prescribed by the Specifications, proposal, MDOT Materials Sampling Guide and/ or other applicable references, guidelines, and procedures manuals and instruction furnished by the Department or as directed by the Engineer, and no variation will be permitted except on written order of the Department.
- D. That acceptance samples, tests, and reporting procedures will conform to the Specifications, proposal, MDOT Materials Sampling Guide and any and all other applicable references, guidelines, and procedures manuals prescribed by the Department.
- E. The inspector(s) will immediately bring to the attention of the Project Engineer Manager, the failure by the Contractor to comply with a plan or specification requirement, any problem, trends toward borderline compliance, or any other occurrence which may require resolution by the Engineer.
- F. The inspector(s) will accurately report, measure, compute, and document all quantities of items of work and all inspection and/ or testing work in accordance with the Specifications, plans, proposal, MDOT Materials Sampling Guide and any and all other applicable references, guidelines, and procedures manuals prescribed by the Department.
- G. The inspector(s) shall provide their own transportation to, from, and on the project site to perform the services outlined herein.

- H. The inspector(s) shall provide lap top computers (or equivalent) with Field Manager and/or Field Book software and produce all daily inspection reports in this format. The inspector(s) shall deliver all inspection reports to the Project Engineer Manager's field office daily unless other arrangements are made.
- I. The inspector(s) shall provide a Troxler Density Gauge and comply with all requirements related to the use of this gauge established by the Nuclear Regulatory Commission and MDOT. This gauge should be calibrated to meet MDOT requirements. The inspector(s) shall be certified as a MDOT density technician.
- J. The inspector(s) shall provide a Roll-O-Meter, Acme or Pres-sure air entrainment gauge for concrete testing. This gauge should be calibrated to meet MDOT requirements.
- K. In addition to providing the aforementioned density and concrete gauges, the inspectors shall provide all measuring and testing equipment required for proper and accurate inspection.
- L. The inspector(s) shall attend all project related meetings and record meeting minutes as requested by the Project Engineer Manager.
- M. The inspector(s) shall provide all required reference materials including, but not limited to, MDOT Standard Specifications, Materials Sampling Guide, Construction Manual, and any and all other necessary applicable references, guidelines and procedures manuals.
- N. The Consultant shall be responsible for any errors that occur on the project due to an inspection and/or testing error. The Consultant will be responsible to compensate MDOT for the additional costs incurred due to an inspection and/or testing error on the project by one of their employees. At such time the error is discovered MDOT will meet with the Consultant to discuss options to rectify the error.
- O. Perform inspection of the construction site to assure that proper soil erosion and sedimentation controls are in place. A MDEQ certified NPDES Storm water Operator shall be assigned to inspect and document the project per the NPDES requirements. Any violation of the NPDES permit by the construction contractor must be immediately reported to the Project Manager. Personnel performing inspection on areas where soil and erosion control are needed, must have completed the Soil and Erosion control training, phase 1, 2, and 3. The street inspector(s) shall be certified as a Soil Erosion & Sedimentation Control and Storm Water Operator.
- P. Prepare and distribute minutes for weekly progress meetings, maintain agenda and list of outstanding issues.

- Q. Keep daily diaries, sketches, logs, and records consistent with Department practice as may be needed to record the Contractor's progress. Notify the Project Manager of any anticipated Contractor's requests for extensions of time. Notify the Project Manager upon receipt of any Contractor's requests for extensions of time.
- R. Withdraw any personnel or halt any services no longer required, at the request of the Department, or within a reasonable time after the lack of need becomes apparent to the Consultant or the Project Manager. The consultant will not be reimbursed for the cost of personnel charged to a project that the Project Manager has determined was unnecessary.
- S. **Coordination:** Provide appropriate coordination, contact, and cooperation with affected local, state, and/or federal agencies; other Consultants and other **Contractors**; the general public; utilities and railroad companies; and local police, fire, and emergency services which may be affected by the Project and which are deemed to be the responsibility of the Consultant by the Department.
- T. **Staking:** Perform staking in accordance with Department standards, including, but not limited to, any staking to be performed by the MDOT Engineer as indicated in section 104.08 in the Standard Specifications for Construction, SP104(A) Contractor Staking, and SP104(B) Staking Bridges in Combined Bridge/Road Projects using Contractor Staking, to ensure accuracy and compliance with the contract documents. This includes preliminary project staking and construction verification staking. Notify the Project Manager of any plan errors, discrepancies, or omissions identified by the Contractor and/or Consultant.
- U. The Consultant shall perform soil borings and subsurface investigation as necessary throughout the contract.

PROJECT INSPECTION

- A. **Ongoing Inspection:** Provide inspection of all Contractor field construction work, provide quality control, and confirm substantial conformance with the Specifications, Plans, and Proposal. Arrange for non-compliance work to be made whole by the Contractor or to find the non-compliance work acceptable to the Consultant and, where necessary, to the MDOT Design Project Manager. Inform the above Project Manager of non-compliance work and trends toward borderline compliance.
- B. **Final Inspection:** Complete a final inspection of all work included in the Project, or such portions thereof eligible for acceptance, after notification by the Contractor that the work is completed or after the Consultant's records show the work is completed.

The final inspection shall include notifying the Contractor in writing of particular defects to be remedied if work is not acceptable to the Consultant.

- C. **Contentious Issues:** Notify the Project Manager of any problems, issues, discrepancies, or other items brought to the attention of the Consultant by the Contractor. Provide written documentation of the resolution of such issues.
- D. **Consultant Deliverables:** Collect, properly label or identify, and deliver to the Department any original diaries, logs, notebooks, accounts, records, reports, as constructed plans, other documents, and Project files prepared by the Consultant in the performance of the Agreement, upon completion or termination of the Agreement. Return, upon completion or termination of the Agreement, Specifications, Manuals, guides, written instructions, construction contracts and plans, unused forms, and any other documents and materials furnished by the Department. The Consultant may be responsible for replacing lost documents or materials at a fair and reasonable price.
- E. **Final Acceptance:** Ascertain that each and every part of the Project has been performed in accordance with the plans and specifications, or such modifications thereof as may have been approved, and accept the Project. Invite the Project Manager and other Department personnel, as directed by current Department policy, to participate in the final acceptance.

TESTING AND REPORTING

- A. **Material Testing and Density Control:** Sample or test, or both, materials including but not limited to, bituminous testing, on site aggregate density testing and reporting. The inspector shall refer to the Plans, Proposal, the Michigan Construction Manual, the Materials Sampling Guide, Materials Quality Assurance Manual, and any and all other applicable references, guidelines, and/or procedures manuals. Determine the acceptability of materials found to be in non-compliance. Immediately inform the Project Manager of non-compliance work and trends toward borderline compliance.
- B. **Material Certification:** Make certain that acceptable test reports and/or material certifications from the supplier have been received, prior to the incorporation of materials in the work, for materials tested off the Project site.
- C. **Testing Personnel:** For aggregate, concrete, density, and HMA testing, utilize only personnel certified according to current Department requirements. Personnel will be certified on all projects (not just NHS projects).

The concrete testing inspector will be certified as a Concrete Technician Michigan Level I through a program certified by Michigan Concrete Association Board of Examiners or the Michigan Concrete Paving Association. The inspector shall have at their disposal all equipment to perform verification testing on the concrete.

Any inspector involved in sampling or testing of Hot Mix Asphalt must be a Michigan Qualified Bituminous QC/QA Technician.

Any inspector performing sampling or testing of aggregates must be a current Michigan Certified Aggregate Technician.

If requested by the Department, supply all certification and calibration information for equipment by employees.

- D. Material Reports:** Submit Material test reports, including but not limited, the Inspector's Report of Concrete Placed 1174A, Aggregate Inspection Reports 1900 & 1901, Bituminous QA reports, Concrete QA reports, and the "Moisture and Density Determination, Nuclear Method", Form 582B, etc. to the distribution list within one day of the testing. The efficiency of the consultant in getting the "Moisture and Density Determination, Nuclear Method", Form 582B, copy to the Lansing, Density Technology Unit, 8885 Ricks Road, Lansing, MI 48909 will be measured by that unit and reflected on the consultant's evaluation.

The consultant and any sub-consultants contracted by the Michigan Department of Transportation (MDOT) to perform density testing services that use equipment regulated by the Nuclear Regulatory Commission (NRC) shall:

- 1. Possess a valid license issued by the NRC, or recognized Agreement State, for ownership and use of sealed sources contained within portable nuclear density gauges.**
- 2. Provide the Radiation Safety Office (RSO) of MDOT with a copy of the aforementioned license.**
- 3. Comply with all rules and regulations set forth by Title 10 (Energy) and 49 (Transportation).**
- 4. Any person performing density testing or handling of nuclear density testing equipment must have completed the Michigan Density Technology Certification Program and successfully completed radiation safety training.**

Failure of any of the above will be found in noncompliance with the contract.

MEASUREMENT, COMPUTATION AND DOCUMENTATION OF QUANTITIES

- A. **Documentation:** Measure and compute quantities, and provide appropriate documentation of all materials incorporated in the work and items of work completed, and maintain an item record account using Field Manager software.
The Consultant must obtain and be able to use the FieldManager Suite of Software for this project. Contact Info Tech, Inc. at (352) 381-4400 or fax (352) 381-4444 or (www.fieldmanager.com) to obtain software and information on training. Since this software will be used on all MDOT projects in the future, the cost of this software cannot be charged as a direct expense for this project. Consultants must keep their version of the FieldManager Suite of software current with the version being used by MDOT.
- B. **Insufficient Tested Materials:** Track insufficient tested materials and notify the Contractor on a bi-weekly basis.

REPORTING AND RECORD KEEPING

- A. **Consultant Reports:** Prepare such periodic, intermediate and final reports and records as may be required by the Department and as are applicable to the Project, which may include, but are not limited to:
- a. **Inspector's Daily Reports,**
 - b. **Construction Item and Tested Material Records using FieldManager,**
 - c. **Monthly Report on Material Inspection,**
 - d. **Moisture and Density Determination Reports (Form 582BM)**
 - e. **Inspector's Report of Concrete Placed (Form 1174A-M)**
 - f. **NPDES Storm water Operator Reports,**
 - g. **Labor Compliance, such as the Weekly Employment and OJT Report (Form 1199),**
 - h. **Weekly Statement of Working Days Charged,**
 - i. **Force Accounts,**
 - j. **Mechanical Analysis, (Form 1901),**
 - k. **Bi-Weekly Construction Progress Report (Form 1102A) and Weekly Statement of Working Days Charged (Form 1116), if applicable**
 - l. **Final Quantity Sheets,**
 - m. **Contractor Evaluation (Form 1182), and**
 - n. **Other records and/or reports as required for the individual Project by the Project Manager and/or as required by Specifications, Plans, Proposal, the Michigan Construction Manual, the Materials Sampling Guide, and any and all other applicable references, guidelines, and/or procedures manuals.**

- B. **Reports-Contractor Generated:** Review, process, and/or approve Construction Contractor submittal of records and reports required by the Department as applicable to the Project which may include, but not limited to:
- a. Working Drawings,
 - b. Contractor's claims for additional compensation and extension(s) of time, extras, adjustments, and
 - c. Staking: Perform staking in accordance with Department standards, including, but not limited to, any staking to be performed by the MDOT Engineer as indicated in section 104.08 in the Standard Specifications for Construction, SP104(A) Contractor Staking, and SP104(B) Staking Bridges in Combined Bridge/Road Projects using Contractor Staking, to ensure accuracy and compliance with the contract documents. This includes preliminary project staking and construction verification staking. Notify the Project Manager of any plan errors, discrepancies or omissions identified by the Contractor and/or Consultant.
 - d. Other reports and records as required for the individual Project by the Project Manager.

CLOSING ALL PROJECT DOCUMENTATION

- A. **Final Measure and Summarize:** Final field measure applicable items of work. Prepare final summaries for applicable items of work. Assist in maintaining As-Constructed Plans throughout the project, showing any field changes, final utility locations, substantial quantity changes, etc. Verify the As-Constructed Plan information that is required to be provided by the Contractor.

MDOT RESPONSIBILITIES:

- A. The Project Manager shall furnish to the Consultant all Project-specific construction contracts, proposals, plans, plan revisions, written instructions, and other information and/or data as deemed necessary by the Project Manager for the Services required herein. Unless such information is available to be downloaded on the MDOT web site then it is the Consultants responsibility to supply the information.
- B. The Department shall furnish off-site inspections and tests of steel, cement, bituminous mixture designs, sewer and drainage pipe, structural steel, prestressed girders and beams, traffic signs, and any other materials customarily tested in the Department laboratories with its own forces or by statewide contracts except concrete aggregates, aggregates, and concrete cylinders. The customary testing is described in the Materials Quality Assurance Manual with exceptions noted within the Specifications, Plans, and Proposal. The Consultant shall be responsible for the sampling and transportation of all the materials to be tested by Department personnel.

- C. The Project Manager shall provide general monitoring and quality auditing inspection of the Project to assure that the Project has been completed in reasonable conformance with the plans and specifications for Project Acceptance and to determine that the work performed to date by the Consultant for Services rendered is reasonable and appropriate before approving the Consultant's requests for progress payments.
- D. The Department shall provide the bituminous plant inspection required for Quality Assurance and will submit the QA reports to the Consultant Project Engineer for analysis and action. The Consultant shall still be responsible for all on-site bituminous inspection required, including, but not limited to, locating the required Quality Assurance cores, and coordinating with the contractor regarding this sampling.
- E. The Project Engineer/Manager will arrange and conduct the Preconstruction meeting as well as prepare and distribute the meeting minutes.

PAYMENT SCHEDULE

Compensation for this Scope of Services shall be on an **actual cost plus fixed fee** basis.

CONSULTANT PAYMENT

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for Services rendered shall not exceed the "Actual Cost Plus Fixed Fee, Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Consultant. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Direct expenses will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this Project.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Engineer Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be

included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Engineer Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

The hours billed for inspectors will not begin until the inspectors report to the project site or to the project office.